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CLAIMS

What is claimed is:

- 1 1. A method for treating or reducing the advancement,
2 severity or effects of an immunological disease in an animal
3 comprising the step of administering a pharmaceutical composition
4 which comprises a therapeutically effective amount of a LT- β -R
5 blocking agent and a pharmaceutically acceptable carrier.
- 1 2. The method according to claim 1, wherein the LT- β -R
2 blocking agent is selected from the group consisting of a soluble
3 lymphotoxin- β receptor, an antibody directed against LT- β receptor,
4 and an antibody directed against surface LT ligand.
- 1 3. The method according to claim 2, wherein the animal is
2 a mammal.
- 1 4. The method according to claim 3, wherein the mammal is
2 a human.
- 1 5. The method according to claim 1, wherein the LT- β -R
2 blocking agent comprises a soluble lymphotoxin- β receptor having
3 a ligand binding domain that can selectively bind to a surface LT
4 ligand.
- 1 6. The method according to claim 5, wherein the soluble
2 lymphotoxin- β receptor further comprises a human immunoglobulin Fc
3 domain.
- 1 7. The method according to claim 1, wherein the LT- β -R
2 blocking agent comprises a monoclonal antibody directed against LT-
3 β receptor.
- 1 8. The method according to claim 7, wherein the composition
2 is administered in an amount sufficient to coat LT- β receptor-
3 positive cells for 1 to 14 days.

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1 9. The method according to claim 4, wherein the LT- β -R
2 blocking agent comprises anti-human LT- β -R mAb BDA8.

1 10. The method according to claim 1, wherein the LT- β -R
2 blocking agent comprises a monoclonal antibody directed against
3 surface LT ligand.

1 11. The method according to claim 10, wherein the composition
2 is administered in an amount sufficient to coat surface LT ligand-
3 positive cells for 1 to 14 days.

1 12. The method according to claim 10, wherein the antibody
2 is directed against a subunit of the LT ligand.

1 13. The method according to claim 4, wherein the LT- β -R
2 blocking agent comprises anti-human LT- β mAb B9.

1 14. The method according to claim 3, wherein the mammal is
2 a mouse and the LT- β -R blocking agent comprises a monoclonal
3 antibody directed against a murine surface LT ligand.

1 15. A method for inhibiting a Th1 cell-mediated immune
2 response in an animal comprising the step of administering a
3 pharmaceutical composition which comprises an effective amount of
4 a LT- β -R blocking agent and a pharmaceutically effective carrier.

1 16. The method according to claim 15, wherein the LT- β -R
2 blocking agent is selected from the group consisting of a soluble
3 lymphotoxin- β receptor, an antibody directed against LT- β receptor,
4 and an antibody directed against surface LT ligand.

1 17. The method according to claim 16, wherein the animal is
2 a mammal.

1 18. The method according to claim 17, wherein the mammal is
2 a human.

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1 19. The method according to claim 15, wherein the LT- β -R
2 blocking agent comprises a soluble lymphotoxin- β receptor having
3 a ligand binding domain that can selectively bind to a surface LT
4 ligand.

1 20. The method according to claim 19, wherein the soluble
2 lymphotoxin- β receptor further comprises a human immunoglobulin Fc
3 domain.

1 21. The method according to claim 15, wherein the LT- β -R
2 blocking agent comprises a monoclonal antibody directed against LT-
3 β receptor.

1 22. The method according to claim 21, wherein the composition
2 is administered in an amount sufficient to coat LT- β receptor-
3 positive cells for 1 to 14 days.

1 23. The method according to claim 18, wherein the LT- β -R
2 blocking agent comprises anti-human LT- β -R mAb BDA8.

1 24. The method according to claim 15, wherein the LT- β -R
2 blocking agent comprises a monoclonal antibody directed against
3 surface LT ligand.

1 25. The method according to claim 24, wherein the composition
2 is administered in an amount sufficient to coat surface LT ligand-
3 positive cells for 1 to 14 days.

4 26. The method according to claim 24, wherein the antibody
5 is directed against a subunit of the LT ligand.

1 27. The method according to claim 18, wherein the LT- β -R
2 blocking agent comprises anti-human LT- β mAb B9.

1 28. The method according to claim 17, wherein the mammal is
2 a mouse and the LT- β -R blocking agent comprises a monoclonal
3 antibody directed against a murine surface LT ligand.

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1 29. The method according to claim 15, wherein the Th1 cell-
2 mediated immune response contributes to a delayed type
3 hypersensitivity reaction.

1 30. The method according to claim 29, wherein the delayed
2 type hypersensitivity reaction is contact hypersensitivity.

1 31. The method according to claim 29, wherein the delayed
2 type hypersensitivity reaction is tuberculin-type hypersensitivity.

1 32. The method according to claim 29, wherein the delayed
2 type hypersensitivity reaction is a granulomatous reaction.

1 33. The method according to claim 15, wherein the Th1 cell-
2 mediated immune response contributes to cellular rejection of
3 tissue in the animal after the animal receives a tissue graft.

1 34. The method according to claim 15, wherein the Th1 cell-
2 mediated immune response contributes to organ rejection in the
3 animal after the animal receives an organ transplant.

1 35. The method according to claim 15, wherein the Th1 cell-
2 mediated immune response contributes to an autoimmune disorder in
3 the animal.

1 36. The method according to claim 35, wherein the autoimmune
2 disorder is selected from the group consisting of multiple
3 sclerosis, insulin-dependent diabetes, sympathetic ophthalmia,
4 uveitis and psoriasis.

1 37. The method according to claim 15, wherein the Th1 cell-
2 mediated immune response is inhibited without inhibiting a Th2
3 cell-dependent immune response.

1 38. A pharmaceutical composition comprising a therapeutically
2 effective amount of a LT- β -R blocking agent and a pharmaceutically
3 acceptable carrier.

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1 39. The composition according to claim 38, wherein the LT- β -R
2 blocking agent is selected from the group consisting of a soluble
3 lymphotoxin- β receptor, an antibody directed against LT- β receptor,
4 and an antibody directed against surface LT ligand.

1 40. The composition according to claim 38, wherein the
2 soluble lymphotoxin- β receptor comprises a LT- β -R ligand binding
3 domain that can selectively bind to a surface LT ligand.

1 41. The composition according to claim 40, wherein the
2 soluble lymphotoxin- β receptor further comprises a human
3 immunoglobulin Fc domain.

1 42. The composition according to claim 38, wherein the LT- β -R
2 blocking agent comprises a monoclonal antibody directed against LT-
3 β receptor.

1 43. The composition according to claim 42, wherein the
2 monoclonal antibody is anti-human LT- β -R mAb BDA8.

1 44. The composition according to claim 38, wherein the LT- β -R
2 blocking agent comprises a monoclonal antibody directed against
3 surface LT ligand.

4 45. The composition according to claim 44, wherein the
5 antibody is directed against a subunit of the LT ligand.

1 46. The composition according to claim 45, wherein the
2 monoclonal antibody is anti-human LT- β mAb B9.

1 47. The composition according to claim 38, wherein the LT- β -R
2 blocking agent comprises a monoclonal antibody directed against a
3 murine surface LT ligand.

1 48. The composition according to claim 42, wherein the
2 antibody is present in an amount sufficient to coat LT- β receptor-
3 positive cells for 1 to 14 days.

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1 49. The composition according to claim 44, wherein the
2 antibody is present in an amount sufficient to coat surface LT
3 ligand-positive cells for 1 to 14 days.

1 50. A method for selecting a LT- β -R blocking agent comprising
2 the steps of:

3 a) culturing tumor cells in the presence of an
4 effective amount of at least one LT- β -R activating agent and a
5 putative LT- β -R blocking agent; and

6 b) determining whether the putative LT- β -R blocking
7 agent decreases the anti-tumor activity of the LT- β -R activating
8 agent.

1 51. The method according to claim 50, wherein the LT- β -R
2 activating agent comprises a LT- α/β heteromeric complex.

1 52. The method according to claim 51, wherein the LT- α/β
2 heteromeric complex has a LT- $\alpha 1/\beta 2$ stoichiometry.

1 53. The method according to claim 50, wherein the LT- β -R
2 activating agent comprises an anti-LT- β -R antibody that stimulates
3 LT- β -R signalling.

1 54. A method for inhibiting LT- β -R signalling without
2 inhibiting TNF-R signalling comprising the step of administering
3 to a subject an effective amount of a LT- β -R blocking agent.

1 55. The method according to claim 54, wherein the LT- β -R
2 blocking agent is selected from the group consisting of a soluble
3 lymphotoxin- β receptor, an antibody directed against LT- β receptor,
4 and an antibody directed against surface LT ligand.

1 56. The method according to claim 54, wherein the subject
2 comprises one or more cells from a mammal.

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1 57. The method according to claim 56, wherein the mammal is
2 a human.

1 58. The method according to claim 54, wherein the LT- β -R
2 blocking agent comprises a soluble lymphotoxin- β receptor having
3 a ligand binding domain that can selectively bind to a surface LT
4 ligand.

1 59. The method according to claim 58, wherein the soluble
2 lymphotoxin- β receptor further comprises a human immunoglobulin Fc
3 domain.

1 60. The method according to claim 54, wherein the LT- β -R
2 blocking agent comprises a monoclonal antibody directed against LT-
3 β receptor.

1 61. The method according to claim 57, wherein the LT- β -R
2 blocking agent comprises anti-human LT- β -R mAb BDA8.

1 62. The method according to claim 54, wherein the LT- β -R
2 blocking agent comprises a monoclonal antibody directed against
3 surface LT ligand.

1 63. The method according to claim 62, wherein the antibody
2 is directed against a subunit of the LT ligand.

1 64. The method according to claim 57, wherein the LT- β -R
2 blocking agent comprises anti-human LT- β mAb B9.

1 65. The method according to claim 56, wherein the mammal is
2 a mouse and the LT- β -R blocking agent comprises a monoclonal
3 antibody directed against a murine surface LT ligand.

1 66. The method according to claims 60, wherein the LT- β -R
2 blocking agent is administered in an amount sufficient to coat LT- β
3 receptor-positive cells for 1 to 14 days.

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1 67. The method according to claims 62, wherein the LT- β -R
2 blocking agent is administered in an amount sufficient to coat
3 surface LT ligand-positive cells for 1 to 14 days.

1 68. A method of treating inflammatory bowel syndrome
2 comprising administering a therapeutically effective amount of an
3 LT- β -R fusion protein.

1 69. The method of claim 68 wherein the fusion protein is LT-
2 β -R a fusion of and an immunoglobulin Fc domain.